

Missouri Department of Natural Resources

## Total Maximum Daily Load Information Sheet

### Dog Creek

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#### Waterbody Segment at a Glance:

**County:** Daviess  
**Nearby Cities:** Gallatin  
**Length of impairment:** 0.2 miles  
**Pollutant:** Non-Volatile Suspended Solids (NVSS)  
**Source:** Traeger Quarry

**Length of impairment is proposed to change from 5.0 to 0.2 miles and from sediment to NVSS on the 2002 303(d) list**



State map showing location of watershed

**TMDL Priority Ranking:** Low

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#### Description of the Problem

##### Beneficial uses of Dog Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life and Human Health associated with Fish Consumption.

##### Use that is impaired

- Protection of Warm Water Aquatic Life

##### Standards that apply

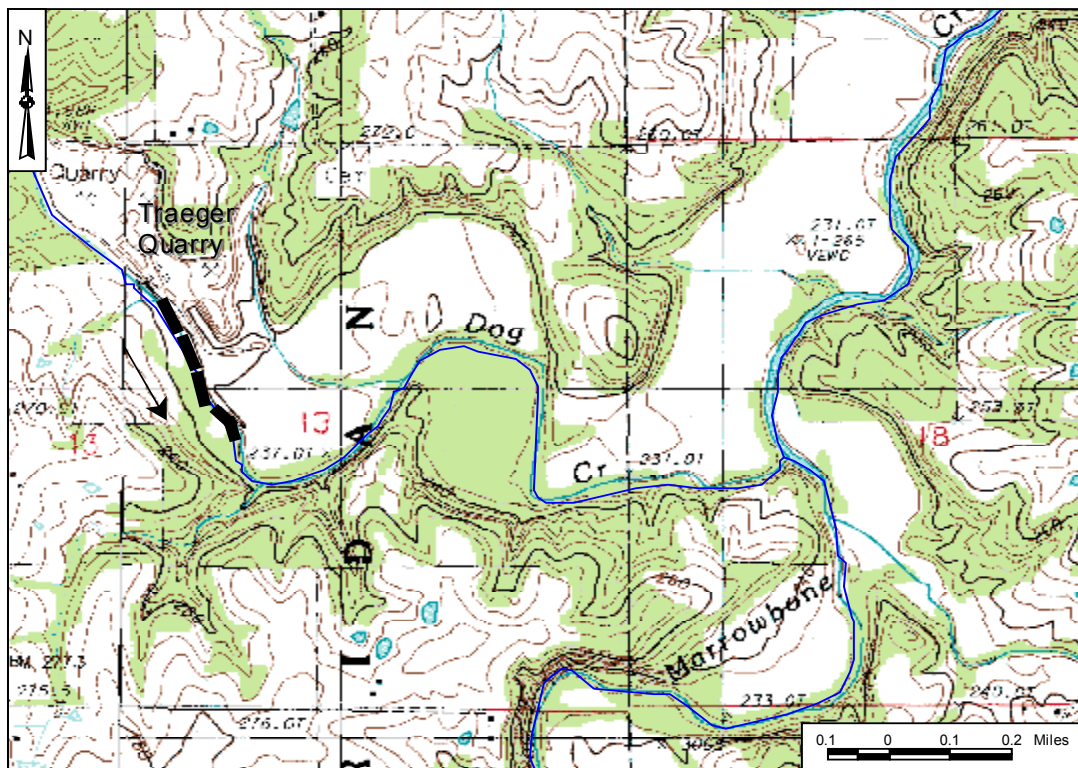
- General criteria contained in Missouri's Water Quality Standards 10 CSR 20-7.030 (3)(A)(C) and (G). These criteria state:
  - (A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.

The impairment is being changed for the new 303(d) list from sediment to Non-Volatile Suspended Solids (NVSS). NVSS results from soil erosion or erosion of mine waste materials or stockpiles (usually silt, sand or gravel). The new listing gives a clearer picture of the specific pollutants affecting the water.

Erosion from the operation of a limestone quarry is contributing a large range of limestone pieces to Dog Creek, from silt-sized particles to large rocks. This is due to the quarry's methods of containment being inadequate or not maintained adequately. The movement of so much limestone into the stream is creating large gravel bars that change the stream flow. This is causing the stream to wander (meander) more and has accelerated bank erosion. Careful examination of the kinds of aquatic invertebrate animals (water insects and crayfish) in the stream indicates their habitat is being degraded. Solids from erosion often settle onto the bottom of a stream smothering natural substrates (materials in the streambed), aquatic invertebrate animals and fish eggs.

The Department of Natural Resources plans a more detailed investigation of the stream at this site to confirm if and how the stream is being degraded. If this investigation indicates continued instream problems due to the quarry operation, the quarry's operating permit (issued by the department) will be amended as needed to improve erosion controls.

### Dog Creek in Daviess County, Missouri, Showing Impaired Segment



— — — — Impaired segment

—————> Direction of flow

#### For more information call or write:

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